

## **Flight Helmets – You Should Wear One!**

Are you protecting the most valuable item in your aircraft? Without proper protection, occupants in aircraft can potentially sustain serious head injuries during an accident. Some flight profiles, such as off-airport operations, aerobatic flights, aerial application flights, warbird flights, public use flights, and helicopter flights are higher risk. Examples of occupant head and facial injury scenarios in an accident sequence include impacting the cockpit dashboard, impacting cockpit and cabin structures, unsecured items inside of the aircraft moving and impacting the head and face, and debris impacting the head and face. Flight helmets can provide an additional head and facial protective safety layer when flying in Alaska, and can aid in hearing protection from loud noises.

When selecting a flight helmet, be sure to select a flight helmet designed for the appropriate aircraft you fly, such as a fixed wing flight helmet for an airplane or a rotary wing flight helmet for a helicopter. Each will be compatible with each type of aircraft's avionics. Additionally, you'll want to thoroughly research which safety specification standards the flight helmet has been designed, manufactured, and tested to when you conduct your selection. Choose a flight helmet based on the amount of protection offered and the comfort level - not on the "cool looking factor." You'll want to try it on and verify the flight helmet is properly fitted to your head and adequately covers the front, top, sides, and rear of the head. If you wear glasses, make sure you wear them when fitting a flight helmet.

Before each flight, inspect the flight helmet for serviceability. When wearing the flight helmet, ensure it is worn correctly, it is secured to the head, and all straps are fastened. While conducting flight operations, an extended flight helmet visor can protect the face during an accident sequence and can also protect the face from a bird strike. It is a good idea to carry a backup headset in the cockpit, just in case the flight helmet's internal communication system malfunctions or fails.

You should use an intermediate communication cord between the flight helmet cord and the airframe inter-communication systems receptacle to facilitate quick egress during an accident or emergency. Avoid direct-to-airframe connections with the flight helmet cord, which could cause delays when egressing from the aircraft during an accident or emergency. For more information on this topic, please see the NTSB link at the end of this article.

Treat your flight helmet well, like an expensive electronic device; exercise gentle care when handling. Make sure you have a padded flight helmet bag for transporting your helmet. If flying on a commercial airline, keep your flight helmet bag as carryon luggage with you in the cabin, as putting your flight helmet bag with checked luggage could expose the flight helmet to potential damage. Be sure to follow the flight helmet manufacturer's guidance on flight helmet inspection intervals, maintenance procedures, cleaning methods, and storage requirements.



Flight helmet bag and helicopter flight helmet

Any damage or significant impact (such as being dropped or while worn in an accident sequence) can compromise the structural integrity of the flight helmet. If this occurs, have the helmet inspected and repaired if needed by the flight helmet manufacturer or an authorized flight helmet repair facility before being used again for flight operations.

If you're looking for additional information, please see:

The Department of Interior has published the *Flight Helmet User's Guide* ([https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/Flight\\_Helmet\\_Users\\_Guide\\_2008.pdf](https://www.doi.gov/sites/doi.opengov.ibmcloud.com/files/uploads/Flight_Helmet_Users_Guide_2008.pdf)), which shows the importance of utilizing a flight helmet through several accident scenarios.

The National Transportation Safety Board has published *Safety Alert 068 Flight Helmet Cords Can Impede Egress* (<https://www.nts.gov/safety/safety-alerts/Documents/SA-068.pdf>) and released a video (<https://youtu.be/JMinY5tg5P0>) discussing the hazard of direct-to-airframe flight helmet cord connections.

The U.S. Army Aeromedical Research Laboratory has published a report, *U.S. Army Aeromedical Research Laboratory Report 93-2, Flight Helmets: How They Work and Why You Should Wear One* (<http://www.usaarl.army.mil/techreports/93-2.pdf>), which discusses the benefits of wearing a flight helmet when conducting helicopter flight operations.

Have a safe flying season!



Pilot and passenger protecting what is important!